

**College of Engineering  
Department of Engineering Education**

**Doctor of Philosophy (PhD)  
Engineering Education**

**Engineering Education Core (15 Credits)**

EED 6090	Developing an Online Educational Curriculum	3 cr
EED 6150	Teaching, Pedagogy, & Assessment in Engineering Education	3 cr
EED 7010	Role of Cognition in Engineering Education	3 cr
EED 7230	Foundations of Engineering Education	3 cr
EED 7460	Finance & Grant Writing	3 cr

**Research Theory Core (9 Credits)**

PSY/EDUC 6570	Introduction to Educational & Psychological Research	3 cr
STAT 5200 or EDUC/PSY 6600	Design of Experiments	3 cr
EDUC/PSY 6600	Measure, Design & Anal. I	
EED 7040	Qualitative Methods in Engineering Education	3 cr

**Engineering Elective – Area of Specialization**

**(6 Credits minimum ) Choose from the following:**

EED 6910	Special Topics in Engineering	3 cr
EED 7500	Education Internationalizing Institutions of Higher Education	3 cr
EED 7810*	Research Seminar	1 cr
EDUC/SPED 7700	Subject Methods & Design	3 cr
PSY 7030	Instrument Development	3 cr
PSY 7070	Adv. Measurement Theories & Practice	3 cr
PSY 7610	Research, Design & Analysis II	3 cr
STAT 5200	Design of Experiments	3 cr
PSY 7650	Longitudinal Res Design & Analysis	3 cr
TEAL 6150	Foundations of Curriculum	3 cr
TEAL 6410	Educational Foundations	3 cr
TEAL 7300	Historical, Social, & Cultural Foundations of Education (Prerequisite: TEAL 6410)	3 cr

**Other appropriate courses may be approved by committee**

**Dissertation (12 Credits minimum)**

**PhD Dissertation:** Students must take an appropriate number of research credit hours to complement their graduate program and be consistent with the Graduate School requirements.

**Additional Degree Requirements**

1. Qualifying Examination
2. Proposal Defense
3. Dissertation Defense/Examination
4. One peer-reviewed journal paper submission or a conference presentation with a peer-reviewed paper per 12 dissertation credits. Minimum 1 journal paper submission required.
5. EED 7810\* - Research Seminar (1 credit) Attendance is required throughout the entire PhD program. Registration is required a minimum of one time.
6. Teaching experience including one or more of the following:
  - a. Two semesters of guided teaching experience
  - b. Experience as a K-12 teacher
  - c. Experience as university/college/community college faculty
  - d. Other equivalent experience approved by the department head and the student's graduate committee